

one leaflet at the expense of the others so that it serves for the whole. In doing this it has not, as yet, taken on the ordinary ways of simple leaves when the time comes to loose its hold upon the vine. We might say that the leaf was still compound, with a single leaflet, or "unifoliolate" as is the term used with the lemon and orange of the ordinary sorts, but not of *Citrus trifoliata*, which is evidently compound.

If we were to go far into phylogeny—perhaps beyond our depths—it might be stated that the subject of our note had early left the simple form of leaf, still adhered to by the grapes proper, became fully compound, as are now its nearest to kin, and then underwent a "degeneration," if this word is the one, and assumed a type of foliage that might easily put it in the genus *Vitis*. The stiff defoliated petioles, however, uphold its place with the compound-leaved group—a position fully maintained by other characteristics of the species.

THE SPREADING OF SOLIDAGO SPECIOSA IN THE VICINITY OF YONKERS, N. Y.

BY MRS. JOHN I. NORTHPROP

Previous to 1898, the only station known to me in this locality for the above plant was on the crest of the hill south of Mt. Hope Cemetery. This handsome goldenrod was always abundant there in several old fields. In the fall of 1898, I noticed that it was spreading towards the southwest in the direction of the Hudson, as a number of plants were seen on a hillside about a mile south of Hastings village. By the next year it had reached Warburton Avenue on the river bank and a few plants were noticed just across the Yonkers line. Under the date of October 3, 1900, my note-book reads: "*S. speciosa* has spread very rapidly since last year and now solidly covers the slope on the edge of the woods near the trolley terminus. It is still spreading south. It is only two years since I have seen it here at all." The same year I found that it had taken possession of a field on the western slope of the Sawmill River valley, a mile or more to the east. Here, too, only a few plants had been noticed the year before.

This year, 1901, I find it is still spreading to the south and east as a few plants were found for the first time along a roadside in the valley, perhaps a quarter of a mile away from the last-mentioned locality. It has also gained a foothold in some fields on the other side of a patch of woods still further south. The most easterly station I have found for it is the southern slope of the ridge west of Grassy Sprain Lake while the most southerly is about half a mile north of Lincoln Park on the main line of the New York Central and Putnam road. If it continues its triumphant march to the south, it will soon cross the New York City line and approach its old possessions, as there was once a station for it, I believe, on Manhattan Island.

In the two cases especially noted above it has taken *Solidago speciosa* but three years to take complete possession of new territory and the goldenrods and asters that formerly flourished there have almost disappeared. It is not only that many new plants seem to spring up but the older ones increase in size very rapidly, one transplanted to my garden more than doubling its size the second year. Many of the old plants sent up seven or eight flower-stalks this year five feet or more in height.

YONKERS, N. Y., November 15, 1901.

HESPERASTER, A GENUS OF LOASACEAE

BY T. D. A. COCKERELL

✓ **Hesperaster** (Western Star); *Bartonia* Sims, Bot. Mag. 36: pl. 1487. 1812. (Not *Bartonia* Muhl., a valid genus of *Gentianaceae* published in 1801.) Biennials or perennials; petals 10 or fewer, narrow and pointed, conspicuous; stamens very numerous, up to 300; leaves pinnatifid with pointed lobes; trichomes barbed; seeds numerous, mostly winged. Type **Hesperaster decapetalus** (*Bartonia decapetala* Sims, l. c.). The genus includes, among others, the following species:

1. **HESPERASTER DECAPETALUS** (Sims). In New Mexico I have found this only at Raton. The flowers open at sunset, and are visited by the larger *Sphingidae*. Just as they open they are visited also by *Bombus*, which can get into them when they are